

AMENDMENT

Please amend claim 1. Please add new claims 32-35. The claims are as follows.

1-15. (Canceled)

16. (Currently amended) A bipolar transistor, comprising:

a base;

an emitter contact formed within the base;

a base contact formed within the base; and

a first wiring stack formed atop the emitter contact and a second wiring stack formed atop the base contact, wherein the second wiring stack includes at least one more wiring level than the first wiring stack, wherein the first wiring stack comprises a first contact atop the emitter contact and a first emitter wiring level atop the first contact, and wherein the second wiring stack comprises a second contact atop the base contact, a first base wiring level atop the second contact, a first via containing a first conductive material atop the first base wiring level, and a second base wiring level atop the first via;

a first dielectric layer atop the base, wherein the first dielectric layer comprises the first contact and the second contact;

a second dielectric layer atop the first dielectric layer, wherein the second dielectric layer comprises the first emitter wiring level and the first base wiring level;

a third dielectric layer atop the second dielectric layer, wherein the third dielectric layer

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comprises the first via; and

a fourth dielectric layer atop the third dielectric layer, wherein the fourth dielectric layer  
comprises the second base wiring level.

17. (Original) The bipolar transistor of claim 16, further comprising a collector contact formed within a subcollector.

18. (Original) The bipolar transistor of claim 16, wherein the emitter contact surrounds the base contact on at least two sides.

19. (Original) The bipolar transistor of claim 16, wherein the emitter contact forms a ring around the base contact.

20. (Original) The bipolar transistor of claim 16, wherein the base contact is a point contact.

21. (Withdrawn) A device, comprising:

at least two bipolar transistors, wherein each bipolar transistor further comprises:

a base contact;

an emitter contact surrounding the base contact; and

wherein at least one side of the emitter contact of the at least two bipolar transistors are in electrical contact.

22. (Withdrawn) The device of claim 21, wherein the emitter contact forms a ring around the base contact.

23. (Withdrawn) The device of claim 21, wherein the base contact is a point contact.

24. (Withdrawn) The device of claim 21, wherein wires of the base contact and wires of the emitter contact are vertically stacked atop the contacts.

25. (Withdrawn) The device of claim 24, wherein the wires of the base contact are stacked at a level higher than the wires of the emitter contact.

26. (Withdrawn) The device of claim 21, further including a collector contact.

27. (Withdrawn) The device of claim 26, wherein wires of the collector contact are stacked higher than wires of the emitter contact.

28. (Withdrawn) The device of claim 21, wherein at least one side of each emitter contact of the electrically connected transistors is in physical contact.

29. (Withdrawn) A device, comprising:

at least two bipolar transistors, wherein the bipolar transistors are electrically connected to one another, wherein a first bipolar transistor has a first wiring stack and a second bipolar

transistor has a second wiring stack, and wherein the second wiring stack comprises at least one more wiring level than the first wiring stack.

30. (Withdrawn) The device of claim 29, wherein the bipolar transistors comprise:

a base contact; and

an emitter contact surrounding the base contact.

31. (Withdrawn) The device of claim 29, wherein current is supplied to the first bipolar transistor.

32. (New) The bipolar transistor of claim 17, further comprising a third wiring stack formed atop the collector contact, wherein the third wiring stack comprises a third contact atop the collector contact, a first collector wiring level atop the third contact, a second via containing a second conductive material atop the first collector wiring level, and a second collector wiring level atop the second via, wherein the first dielectric layer comprises the third contact, wherein the second dielectric layer comprises the first collector wiring level, wherein the third dielectric layer comprises the second via, and wherein the fourth dielectric layer comprises the second collector wiring level.

33. (New) The bipolar transistor of claim 16, wherein the second wiring stack further comprises a second via containing a second conductive material atop the second base wiring level and a third via containing a third conductive material atop the second via, wherein the bipolar transistor further comprises a fifth dielectric layer comprising the second via and a sixth dielectric layer

comprising the third via.

34. (New) The bipolar transistor of claim 16, further comprising a collector contact formed within a subcollector, wherein the collector contact is disposed principally on a single side of the base, and wherein the emitter contact surrounds the base contact.

35. (New) The bipolar transistor of claim 16, further comprising a substrate and a collector, wherein the substrate comprises the base, wherein the base abuts an isolation structure formed in the substrate, wherein the emitter contact at least partially surrounds the base contact, and wherein the collector is disposed below the base and abuts the isolation structure.